FIG. 1

FIG. 2

POWER

MENU

207

203

DETERMINE

205

PRINT

d   204

UP

208

DOWN

209   BLUE   RED   GREEN   YELLOW

1	2	3
4	5	6
7	8	9

206

0

201

132

202

FIG. 3

```
                    ┌──────────────────────────┐  ⌐S3-1
                    │ d-BUTTON TO START DISPLAY│
                    └──────────────────────────┘
                                │
                    ┌──────────────────────────┐  ⌐S3-2
                    │  DERIVE DATA OF DATA      │
                    │  BROADCASTING AND         │
                    │  CONSTRUCT DOM-TREE       │
                    └──────────────────────────┘
                                │
                    ┌──────────────────────────┐  ⌐S3-3
                    │  EXECUTE BEGINNING        │
                    │  SCRIPT OF PAGE           │
                    └──────────────────────────┘
                                │
                    ┌──────────────────────────┐  ⌐S3-4
                    │ VISUALIZE PAGE INFORMATION│
                    └──────────────────────────┘
                                │
                    ┌──────────────────────────┐  ⌐S3-5
                    │  PROCESS OF SYNTHESIZE    │
                    │  IMAGE                    │
                    └──────────────────────────┘
```

S3-6 USER INPUT EVENT ? — YES → S3-7 EVENT DEFINED ? — YES → S3-8 EXECUTE SCRIPT IN PAGE

S3-7 EVENT DEFINED ? — NO

S3-6 USER INPUT EVENT ? — NO

S3-9 BROADCASTED EVENT ? — YES → S3-10 EXECUTE SCRIPT IN PAGE

S3-9 BROADCASTED EVENT ? — NO

S3-11 PRINT BUTTON INPUT ? — YES → S3-12 PAGE PRINTING PROCESS

S3-11 PRINT BUTTON INPUT ? — NO

FIG. 4

FIG. 4A
FIG. 4B

FIG. 4A

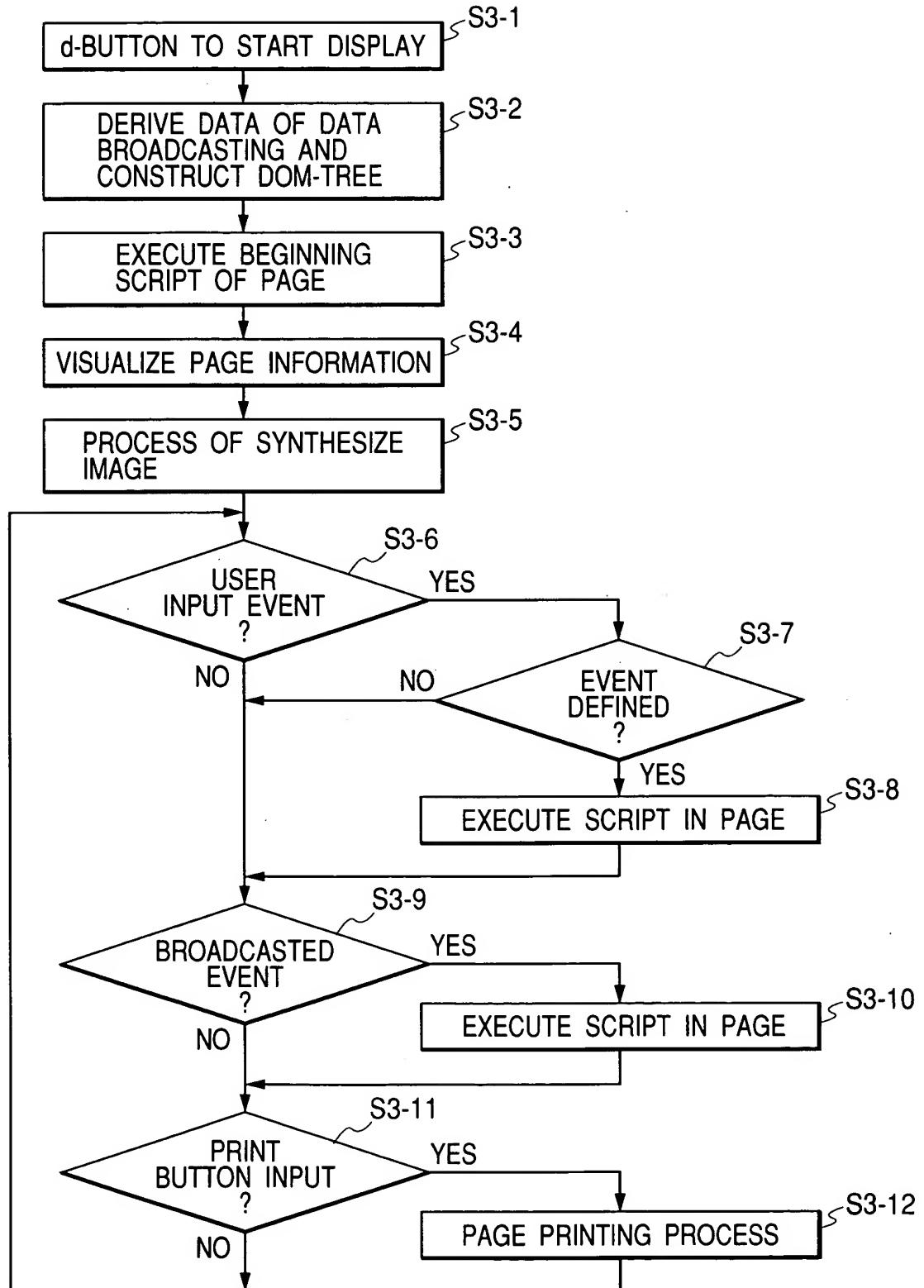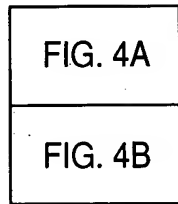(1) XML SOURCE (XML DATA USED IN EMBODIMANT 1 (START UP SCREEN)
) EXAMPLE)

```
<!DOCTYPE dbc SYSTEM "http://www. xxx. co. jp/dbc. dtd">
<head>
<title> Music Program </title>
<script language = "JavaScript">
function initialize () {
}
function enablePrint () {
    document. getElementById ("movie"). style. printability = true;        // (C)
}
function disablePrint () {
    document. getElementById ("movie"). style. printability = false;        // (D)
</script>
</head>
<bevent>
    <bitem type = "EventMessageFired" subscribe = "subscribe" message_id = "01"
on occur = "enablePrint () ;/>        // (I)
    <bitem type = "EventMessageFired" subscribe = "subscribe" message_id = "02"
on occur = "disablePrint () ;/>        // (J)
</bevent>
<body onLoad = "initialize () ">        // (A)
<div style = "left : 60px ; top : 40px ; width : 480px ; height : 270px ;">
    <object id = "movie" style = "left : 0px ; top : 0px ; width : 480px
; height : 270px ; printability = false" data = "/-1" type = video/X-arib-mpeg2" remain
= "remain"/>        // (B)
```

FIG. 4B

```
<object data = "/-1  type = "video/X-arib-mpeg2-aac"  streamstatus = "play"/>
</div>
<div  style = "top : 38px ; left ; 583px ; width ; 310px ; height : 463px">
    <p  style = "left : 5px ; top : 10px ; width : 300px ; height : 80px ; font-size : 24px
; line-height : 24px ; > SINGING  PROGRAM  DATA </p>
<div  style = "top : 90px ; left ; 5px ; width ; 300px ; height : 130px ;">
    <p  id = "pName"  style = "top : 5px ; left : 1px ; width : 300px ; height : 28px
; font-size : 24px> NEW  FEMALE  SINGER  U </p>
<p  id = "pName"  style = "top : 25px ; left : 1px ; width : 300px ; height : 28px
; font-size : 24px> AGE : 17 </p>

              :

              :

              :

    </div>
</div>
<div  style = "left : 70px ; top : 350px ; width : 480px ; height : 50px ; ">
    <object  id = "HeiseiPR"  style = "left : 20px ; top : 20px ; width : 30px ; height
: 30px : visibility = false ; printability = true ;  "data = "Heisei. png"  type = "image/
X-atrib-png"/>
</div>
</body>
```
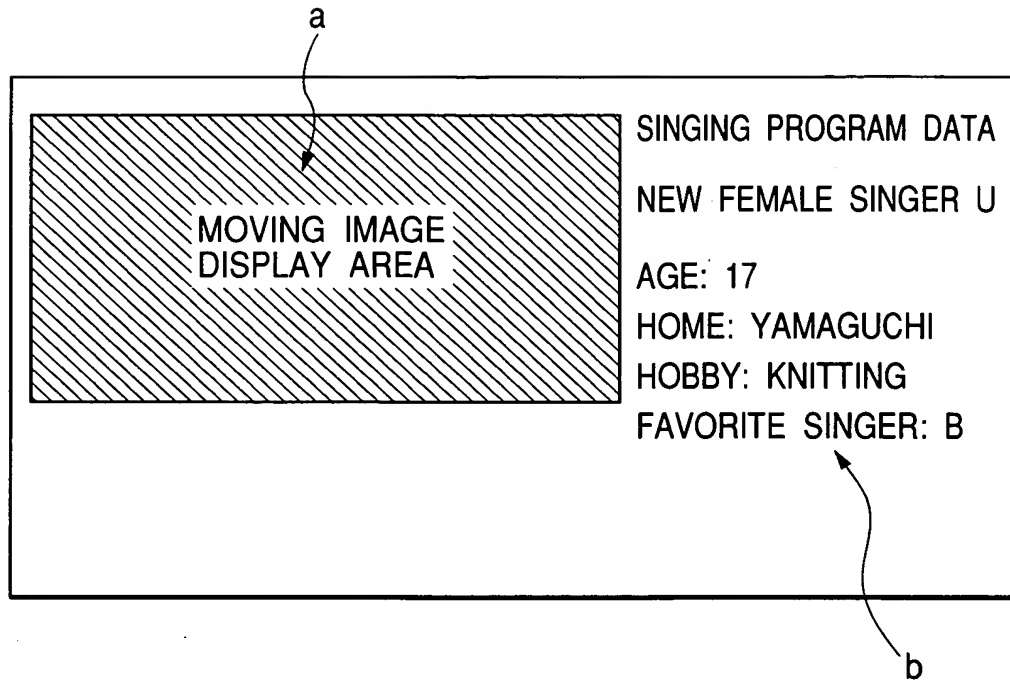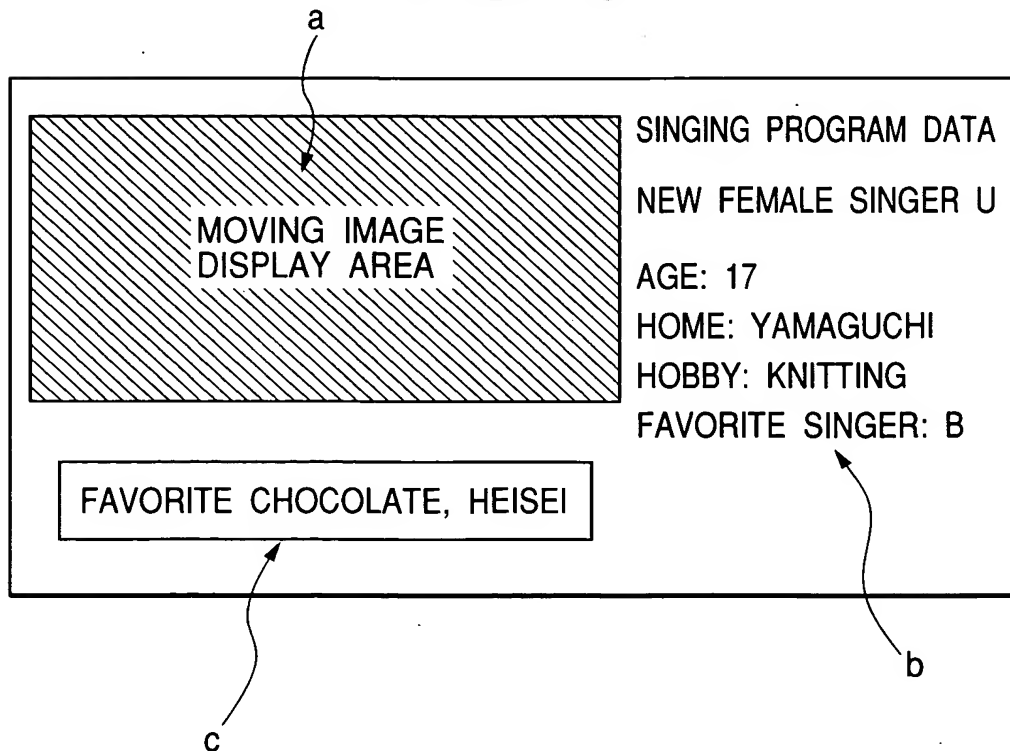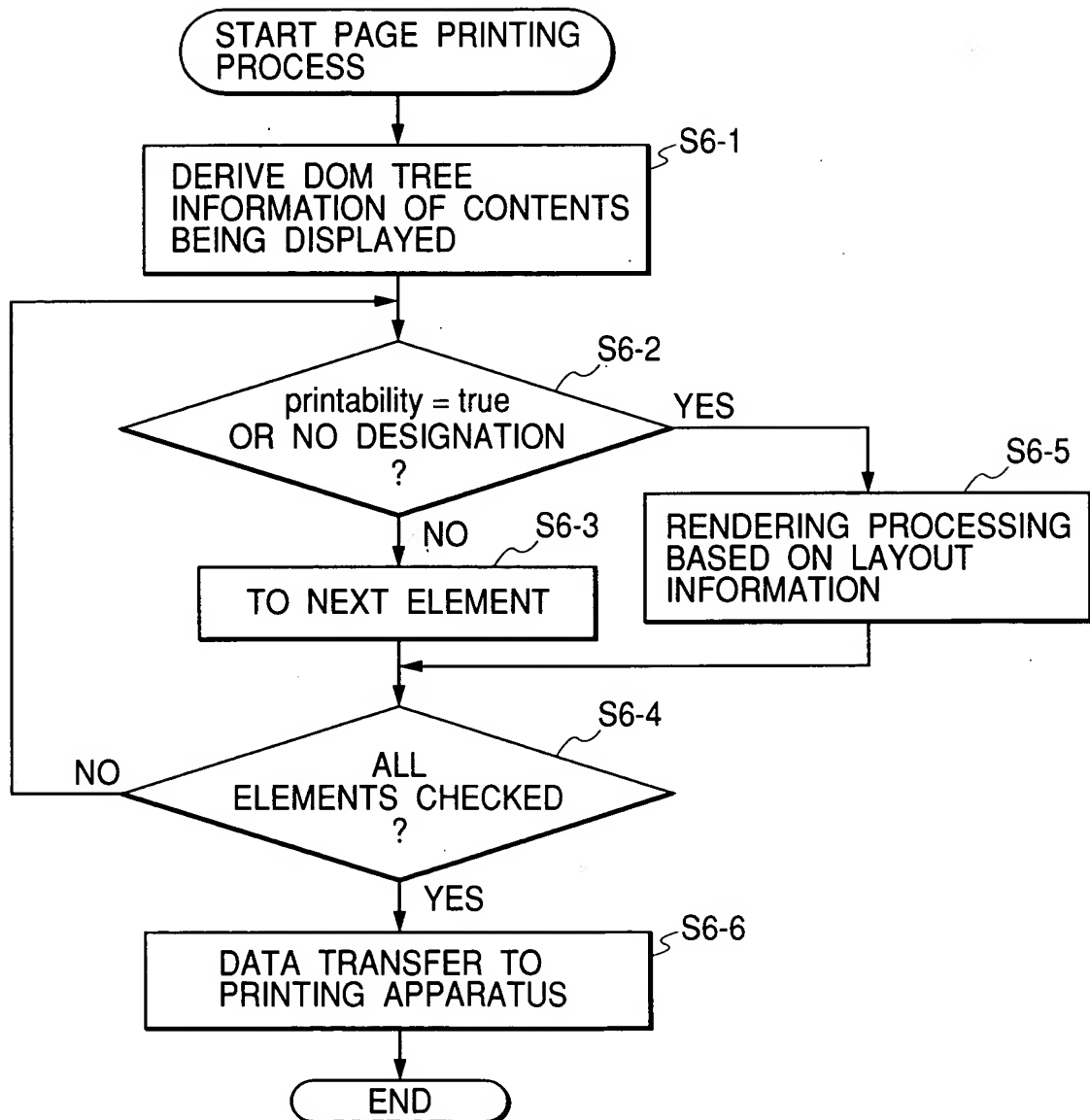
FIG. 5

a

| MOVING IMAGE DISPLAY AREA | SINGING PROGRAM DATA

NEW FEMALE SINGER U

AGE: 17
HOME: YAMAGUCHI
HOBBY: KNITTING
FAVORITE SINGER: B |

b

FIG. 6

a

| MOVING IMAGE DISPLAY AREA | SINGING PROGRAM DATA

NEW FEMALE SINGER U

AGE: 17
HOME: YAMAGUCHI
HOBBY: KNITTING
FAVORITE SINGER: B |

FAVORITE CHOCOLATE, HEISEI

b

c

FIG. 7

```
         ╭─────────────────────────╮
         │ START PAGE PRINTING     │
         │ PROCESS                 │
         ╰─────────────────────────╯
                      │
                      ▼
         ┌─────────────────────────┐  S6-1
         │ DERIVE DOM TREE         │
         │ INFORMATION OF CONTENTS │
         │ BEING DISPLAYED         │
         └─────────────────────────┘
                      │
                      ▼
              ◇─────────────◇  S6-2
             ╱ printability   ╲        YES
            ◇ = true           ◇──────────────┐
             ╲ OR NO          ╱               │
              ╲ DESIGNATION  ╱                │
               ◇─────?─────◇                  ▼
                      │ NO          ┌──────────────────────┐  S6-5
                      │   S6-3      │ RENDERING PROCESSING  │
                      ▼             │ BASED ON LAYOUT       │
         ┌────────────────────┐     │ INFORMATION           │
         │ TO NEXT ELEMENT    │     └──────────────────────┘
         └────────────────────┘                │
                      │◄───────────────────────┘
                      ▼
              ◇─────────────◇  S6-4
       NO    ╱      ALL       ╲
    ┌───────◇ ELEMENTS CHECKED ◇
    │        ╲       ?        ╱
    │         ◇─────────────◇
    │                │ YES
    │                ▼
    │     ┌────────────────────┐  S6-6
    │     │ DATA TRANSFER TO   │
    │     │ PRINTING APPARATUS │
    │     └────────────────────┘
    │                │
    │                ▼
    │          ╭──────────╮
    │          │   END    │
    │          ╰──────────╯
    └──────────(loop back to S6-2)
```

FIG. 8

SINGING PROGRAM DATA

NEW FEMALE SINGER U

AGE: 17
HOME: YAMAGUCHI
HOBBY: KNITTING
FAVORITE SINGER: B

FAVORITE CHOCOLATE, HEISEI
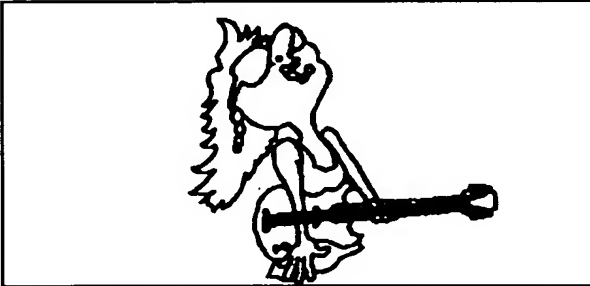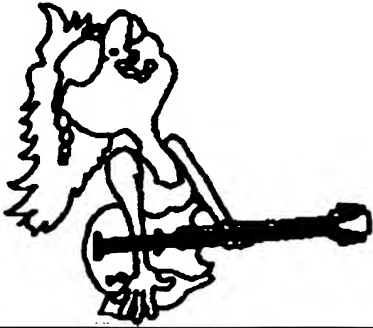
FIG. 9

SINGING PROGRAM DATA

NEW FEMALE SINGER U

AGE: 17
HOME: YAMAGUCHI
HOBBY: KNITTING
FAVORITE SINGER: B

FAVORITE CHOCOLATE, HEISEI

FIG. 10

SINGING PROGRAM DATA

NEW FEMALE SINGER U

AGE: 17
HOME: YAMAGUCHI
HOBBY: KNITTING
FAVORITE SINGER: B

IF YOU ANSWER QUIZ CORRECTLY,
YOU CAN PRINT SCREEN IMAGE.

WHICH IS THE COLOR OF DRESS U
WEARS IN THE PROGRAM ?

```
function KeyDown() {
        if(code ="RED")
                    document.getElementById("photo").style.
printability = true;
        }
```